

FOUR NEW COMBINATIONS IN MOSIERA (MYRTACEAE) FROM THE CARIBBEAN

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ABSTRACT

New combinations for four Caribbean species of Myrtaceae formerly assigned to *Eugenia* L. or *Psidium* L. are proposed: **Mosiera androsiana**, **M. cuspidata**, **M. gracilipes**, and **M. xerophytica**. A lectotype is selected for *Mosiera androsiana*.

RESUMEN

Se proponen nuevas combinaciones para cuatro especies caribeñas de Myrtaceae previamente asignadas a *Eugenia* L. o *Psidium* L.: **Mosiera androsiana**, **M. cuspidata**, **M. gracilipes**, y **M. xerophytica**. Se selecciona un lectotipo para *Mosiera androsiana*.

Recent taxonomic and molecular studies of *Mosiera* (Landrum 1992; Salywon 2003; Salywon et al. 2004; Salywon & Landrum in press) have clarified the boundaries of the genus. However there are no morphological synapomorphic characters that differentiate *Mosiera* from related genera. It is therefore separated from other genera by a combination of characters including: tetramerous flowers, lustrous or glandular seed coats one to six cells thick, and C-shaped embryos with cotyledons that are ca. $\frac{1}{4}$ the length and about the same width as the hypocotyls. Landrum and Kawasaki (1997) and Salywon and Landrum (in press) provide keys to distinguish *Mosiera* from similar genera. The genus contains approximately 18 species distributed mainly in the Caribbean, with two species in Mexico and one of these in Guatemala. New combinations are required for four Caribbean species previously placed in *Eugenia* or *Psidium* that can be assigned to *Mosiera*, in order to make the names available for a manuscript in preparation on the molecular systematics of the family (Salywon et al. in prep.).

Mosiera androsiana (Urban) Salywon, comb. nov. BASIONYM: *Eugenia androsiana* Urban, Fedde, Rep. Sp. Nov. 13:467. 1915. *Psidium androsianum* (Urban) Correll, J. Arnold Arbor. 58:41. 1977. TYPE: BAHAMAS: Andros, Mangrove Cay, coppice, near Lisbon Creek, 16–19 Jan 1910, *Small & Carter* 8496 (LECTOTYPE, selected here: NY [vascular plant type image library # 84,503]; ISOLECTOTYPES: F, US [2 sheets]).

The holotype in Berlin is lost, and the NY specimen is here chosen as the lectotype. *Mosiera androsiana* is morphologically most similar to *M. longipes* (O. Berg) Small but differs in having leaves $0.5\text{--}2.1 \times 0.15\text{--}1$ cm (vs. $1.1\text{--}5.2 \times 0.2\text{--}3.8$ cm) with the secondary venation not visible (vs. secondary venation visible), and seeds ca. 3 mm long (vs. ca. 2 mm long). The leaf morphology of this species is among the most variable in the genus.

Mosiera cuspidata (Alain) Salywon, comb. nov. BASIONYM: *Psidium cuspidatum* Alain, Brittonia 20:159. 1968. TYPE: HISPANOLA [DOMINICAN REPUBLIC]: Boca del Infierno, Los Haitises. Samaná Prov., on limestone cliffs, near the edge of water, 24 Jun 1930, *Ekman* H. 15427 (HOLOTYPE: US; ISOTYPES: MICH, S).

Mosiera cuspidata is a shrub or small tree to 4 m tall with distinctively large leaves for the genus. It is ecologically interesting because it grows on vertical limestone cliffs and on small emergent limestone outcrops in the ocean with little or no soil.

Mosiera gracilipes (Alain) Salywon, comb. nov. BASIONYM: *Psidium gracilipes* Alain, Phytologia 25:269. 1973. TYPE: DOMINICAN REPUBLIC. [Cordillera Central]: [Prov. La Vega, Municipio de Constanza], Loma Redonda, Ciénaga de la Culata, Constanza, in cloud forest, 1700–2000 m, 30 Nov 1969, *Alain* 17138 (HOLOTYPE: NY; ISOTYPES: JBSD, US).

This species is known only from three collections, all from the same locale, and may be of conservation concern as clearcutting for farmland and wood has deeply encroached into the cloud forest where this species grows. Additional fieldwork is needed to determine if it is distributed on other mountain tops nearby.

Mosiera xerophytica (Britton) Salywon, comb. nov. BASIONYM: *Eugenia xerophytica* Britton, Bull. Torrey Bot. Club 51:11. 1924.
TYPE: PUERTO RICO: Cayo Muertos, limestone rocks, shrub, 2 m, barren, leaves shining above, 9–12 Mar 1915, Britton, Cowell & Brown 4982 (HOLOTYPE: NY; ISOTYPE: US).

In the early 1990s, Myrtaceae specialist Bruce Holst (presently at Selby Botanical Gardens), while working at Missouri Botanical Garden, first recognized that this species was out of place in *Eugenia* and suggested it might belong in *Psidium*. He therefore brought it to the attention of Les Landrum, at Arizona State University, who is conducting revisionary work on the genus. Subsequently, Landrum and Bonilla (1996) in a study of anther glandularity in the American Myrtinae determined that this species should be transferred to *Mosiera*, but they did not make the new combination. Instead they deferred doing so until the genus could be worked on as a whole.

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